with observation of a skilled snake handler (not most 'jadhu walas'), and finally personal experience.

C/o K. CHATTOPADHYAYA, 6, CHATEAU MARINE, MARINE DRIVE, BOMBAY, January 10, 1969.

ROMULUS WHITAKER

11. NEW LOCALITY RECORDS OF HORAICHTHYS SETNAI KULKARNI, FROM NARMADA AND TAPTI RIVERS

Horaichthys setnai Kulkarni (Family Horaichthyidae) is a small, translucent cyprinodont fish, with elongate, narrow and somewhat compressed body. Being a small fish, it is 'absolutely insignificant and worthless as food', but is 'a suitable species for use in malarious areas of coastal waters' (Job 1940). The distribution of this species, as recorded by Kulkarni (1940), is 'the backwaters and tanks within tidal limits along the western coast of Peninsular India, about 160 km. (=100 miles) north and south of the city of Bombay'. Job (op. cit.) has recorded this species 'from shallow inlets within tidal influence of backwaters in Cochin and Travancore' and in his opinion, 'this fish extends throughout the western coast of Peninsular India'. As this fish is 'a valuable adjunct to other major larvivores like Aplocheilus lineatus and A. panchax' (Job, op. cit.), it is of prime importance to have exact knowledge of the distribution of this larvicidal fish. Based on the collections of this species from Narmada and Tapti rivers during the 1962 monsoon season, two new locality records are reported in the present communication.

Several specimens of *H. setnai* were collected from spawn-collection nets, while the spawn prospecting investigations were in progress in the lower reaches of Narmada and Tapti Rivers in Gujarat State during the 1962 monsoon season. 18 specimens of this species, measuring 17-25 mm. in total length, were collected from Narmada River at Jhanor, about 64 km. from the sea and about 24 km. below the tidal limit (at Bhalod) on 22nd, 25th and 28th July 1962 and 21st August 1962. 197 specimens in the size range 18-30 mm. were collected from Tapti River at Kathor, about 40 km. from the sea and about 5 km. above the tidal limit (at Abhrama) from 9th to 22nd July 1962, and one solitary specimen measuring 22 mm. in total length at Bodhan, about 50 km.

from the sea and about 15 km. above the tidal limit (at Abhrama) on 14th July 1962.

Narmada and Tapti Rivers are located outside the known range of distribution of *H. setnai* and the collection of the species from these localities, extends the range of its distribution, along the coast, as far as the Narmada estuary, about 320 km. north of Bombay.

Although this species has been recorded, in summer, from a creek-near Mahad in Kolaba district, about 56 km. (= 35 miles) from the sea (Kulkarni, op. cit.), its ascent in Narmada and Tapti Rivers, against the fast current during monsoon floods or even against the feeble current in summer months, as far inland as 64 km. from the sea in the case of the former river and to freshwater regions beyond the tidal limits of the latter river is of some significance in view of the statement of Kulkarni (op. cit.) that it is a typical backwater species and has not been found in flowing waters.

According to Kulkarni (op. cit.) H. setnai is able to withstand a wide range of salinity (1.348% during monsoon to 4.363% during summer). He conducted a few experiments to acclimatize this species to freshwater and found that the fish lived in freshwater aquarium for about $2\frac{1}{2}$ months, but did not show its characteristic vigour or active habits in freshwater. The occurrence of this species in large numbers in freshwater zone of Tapti River at Kathor during monsoon season has, however, indicated that it is capable of thriving in flowing freshwater.

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NARMADA TAPTI UNIT, CENTRAL INLAND FISHERIES RESEARCH INSTITUTE, HOSHANGABAD (M. P.), August 25, 1970.

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REFERENCES

Job, T. J. (1940): Notes on the geographical distribution and larvicidal propensities of *Horaichthys setnai* Kulkarni. *J. Bombay nat. Hist. Soc.* 42 (1): 447.

Kulkarni, C. V. (1940): On the syste-

matic position, structural modifications, bionomics and development of a remarkable new family of Cyprinodont fishes from the province of Bombay. *Rec. Indian Mus.*, Calcutta 42 (2): 379-423

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